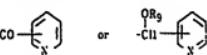


87-12084/3/19 CO2 Ciba 01.10.85
 Ciba Geigy AG *EP 221-844-A
 01.10.85 CH-004245 (12.05.87) A01n-43/40 C07d-213/30
 New 1-phenoxypyridyl-alkanone and-alkanol derivs. - useful as
 fungicides, bactericides and plant growth regulators
 C87-054365 E(AT BE CH DE ES FR GB GR IT LI LU NL SE)

C17-D4, 12-A1, 12-A2C, 12-P1, 12-P2) 3

R₈ =



R₉ = H, 1-6C alkyl, 3-6C alkenyl, 3-6C alkyanyl, or benzyl (opt. ring-subst. by halo, 1-6C alkyl or 1-6C alkoxy, both opt. ring-subst. by halo); CN, 1-6C alkoxybenzonyl or phenyl; R₉ and R₁ = H, 1-6C alkyl, 3-6C alkenyl, 3-6C alkyanyl, or phenyl or benzyl (both opt. ring-subst. by halo, 1-6C alkyl or 1-6C alkoxy, both opt. ring-subst. by halo);

R₄, R₅, R₆, R₇ = H, 1-6C alkyl, 3-6C alkenyl, 3-6C alkyanyl, or phenyl or benzyl (both opt. ring-subst. by halo, 1-6C alkyl or 1-6C alkoxy, both opt. ring-subst. by halo);

R₉ = H, 1-6C alkyl, 3-6C alkenyl, 3-6C alkyanyl, or benzyl (opt. ring-subst. by halo, 1-6C alkyl or 1-6C alkoxy, both opt. ring-subst. by halo); provided that the CO gp. in R₉ must be in the 3- or 4-position when R₁, R₂, R₄, R₅ and R₇ are all H, R₃ = MeO and R₆ = Me; and R₉ can also be R₁CO;

R₁₀ = 1-6C alkyl (opt. subst. by halo), 3-6C alkenyl or alkyanyl, 2-5C alkoxy-alkyl, 3-6C cycloalkyl (opt. subst. by 1-3C alkyl) or phenyl, benzyl or phenethyl (opt. ring-subst. by halo, 1-6C alkyl or alkoxy, both opt. subst. by halo).

USES/ADVANTAGE

(1) are microbicides, effective against phytopathogenic bacteria and fungi; they have curative, systemic and esp.

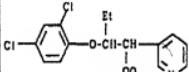
EP-221844-A

preventative properties and can be applied to plants, seeds or soils. Some (1) also have plant-growth regulating activity and at higher doses inhibit excessive vegetative growth of crops.

Pre. application rates are 150-600 g/ha.

SPECIFICALLY CLAIMED

9 Cpd.s. c.g.



Q = H, Me, MeCO or MeO.CH₂CO.

PREPARATION



Ar = phenyl subst. by R₁ to R₅
 R¹ = 1-4C alkyl, 3-6C alkenyl, or phenyl or benzyl, opt. subst. by alkyl, alkoxy, halo, NO₂ or CN.

Reaction is pref. at -10 to 20°C, with Mg (in the form of a Grignard reagent) or BuLi as metallising agent.

(2)



Reaction is pref. at 0-120°C.

Both methods produce ketones which can be reduced conventionally to alcohols and these opt. alkylated or acylated.

EXAMPLE

160.2 g 95% 2,4-dichlorophenyl and 232 g K₂CO₃ were mixed in 1 l octane, then heated briefly to boiling, cooled to 0°C and gradually treated over 1 hr. with 224.8% 3-(bromoacetyl)pyridine hydrobromide.

The mixt. was stirred for 15 hr. at 0-5°C and for 6 hr. at 20°C, then filtered and the mixt. evaporated. Recrystn. of the residue from MeOH gave 2-(2,4-dichlorophenoxy)-1-(3-pyridyl)-1-ethanone, m.pt. 118-9°C.
 (31pp1251DAHDwgNo0/0).
 (G) ISR: DE2742173 EP-117485 DE2909754.

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